

Scales

Categorical

- a.k.a. Qualitative
- Can be represented with numbers or text
- The only valid operations are counts, percentage in each category, and mode

a.k.a. *data types*, but not the same as data types in programming (e.g. float, integer, char, etc.)

Numeric

- a.k.a. Quantitative
- Can only be represented with numbers
- Valid operations depend on types below

Nominal

Different by name only (e.g. Eye color as blue, brown, green or 0, 1, 2)

Ordinal

Different by name & order (e.g. Quality rating as good, better, best or 1, 2, 3)

Discrete

Whole numbers only (e.g. Number of children in a family)

Continuous

Rational numbers, which are numbers that can be expressed as fractions (e.g. Temperature & Height)

Discrete or Continuous can be either...

- * **Interval**: Different by order & distance. (e.g. Temperature)
- * **Ratio**: Different by order, distance, & have a true zero. (e.g. Height & Number of children in a family)